

region of North Carolina; also the excellent coal of Wyoming Territory, and that of similar excellence in Washington Territory, in the Cascade mountains. The latter exists in great abundance and of several varieties, one of which has the appearance of anthracite. It is widely exported—to San Francisco and the Hawaiian islands.

*Brown Coal* is of Cænozoic age. It is next in order of hardness and value. It varies, however, from a variety quite firm and compact, with a blackish color, to varieties of brown color and composed distinctly of vegetable fragments.

*Peat* is a vegetable accumulation formed at the present surface, from mosses, leaves, and sticks, and is not yet consolidated into the condition of a coal. It is used, however, extensively as a fuel, especially on the continent of Europe, where the traveler may see it cut out in blocks and piled up like bricks drying in the sun. The city of Paris is warmed chiefly by peat. Many efforts have been made in America to reduce peat to a cheap and efficient fuel; but for the present, it is unable to compete with our other natural combustibles.

Coal occurs in strata—not in veins—interbedded with sedimentary rocks. Shales, clays, and sandstones exist extensively in Coal Measures; and in some regions, limestones are interstratified. The latter contain fossil shells, and are manifestly of marine origin. The coal must have been produced on the land. Some of the clays are apparently the soil in which the vegetation grew, since the roots are found extending into them. The shales were deposited in quiet, muddy waters, within easy reach of the products of the land, since they contain immense quantities of fronds and other vegetable matters, generally in a fine state of preservation.

In regions somewhat disturbed, like Pennsylvania, the strata of coal make outcrops like limestones, shales, and sandstones. Mining is then prosecuted from the “crop” by carrying an excavation or *drift* along the slope of the coal stratum. If possible, the place is so selected that the slope may ascend from the mouth, so that the water reached may flow out spontaneously. If this is not practicable, then pump-